

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
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)	
Petitions Regarding Off-Campus Use of)	CC Docket No. 02-6
Existing E-Rate Supported Connectivity)	WC Docket No. 10-90
)	WC Docket No. 13-184
Schools and Libraries Universal Service)	
Support Mechanism)	
)	

**INITIAL COMMENTS FROM THE STATE OF NEBRASKA OFFICE OF THE CIO AND THE
NEBRASKA DEPARTMENT OF EDUCATION
ON PETITIONS
REGARDING OFF-CAMPUS USE OF EXISTING
E-RATE SUPPORTED CONNECTIVITY
(DA 16-1051)**

The State of Nebraska Office of the Chief Information Officer (OCIO) and the Nebraska Department of Education (NDE) submit the following comments in support of Boulder Valley’s and Microsoft’s petitions for waivers of the off-campus cost allocation rule on a trial basis as means for the Commission to explore and encourage technological and practical solutions to the “homework gap” problem.

Background

The State of Nebraska OCIO was given administrative and management responsibility by the Nebraska State Legislature in 2006 to work in partnership with the University of Nebraska to develop and maintain a statewide, multipurpose, high capacity, scalable telecommunications network to be called *Network Nebraska*. The network consists of contractual arrangements with providers to meet the demand of educational entities. The network provides access to a reliable and affordable infrastructure capable of carrying a spectrum of services and applications, including distance education, across the state. (Neb. Rev. Stat. 86-5,100)

Since 2006, the OCIO and the University of Nebraska have partnered to carry out the vision of the Legislature to create a single, statewide, IP-based network that interconnects K-12 school districts, educational service units, and higher education. On July 1, 2016, Network Nebraska accepted its 291st participant in this statewide consortium. Participation now includes:

- 245 public school districts (100%)
- 17 Educational Service Units (100%)

- 8 community colleges [including 2 tribal colleges] (100%)
- 3 state colleges (100%)
- 1 University of Nebraska (100%)
- 7 of 14 private colleges (50%)
- 40 private, denominational schools (20%)
- 2 public libraries (1%)

Network Nebraska-Education daily serves approximately 425,000 K-12 and higher education students and staff with 71 Gbps of Internet.

An estimated total of 98% of Nebraska's 245 public school districts are now connected with scalable fiber telecommunications circuits to the statewide network. Even as fiber connected as Nebraska school districts are, tragically, in many rural areas, this digital abundance ends when students step off the curb of the school campus.

Introduction

K-12 education resources are becoming increasingly digital and more and more web-based. Learning management systems, student information systems, and content management systems all require students, parents, teachers, and administrators to have constant and convenient access to the Internet at ample speeds to download, upload, view, and interact with content, learning activities, grades, formative assessments, and records. Never before in the history of education has it been more necessary for all students to have 24/7 access using an Internet-connected computer or tablet with viewable screen and keyboard.

Equity of Access

Since the advent of the Internet and use of the computer for learning activities, there has always been a digital divide. Originally, it was the discrepancy between no access and dial-up access. It evolved into the gap between dial-up access and always on (cable modem/DSL) access. Today, it is regarded as the chasm between no access and gigabit access. Unfortunately, the fast have become faster, and many of the no access households have remained with no access or grossly underserved access. So, the division between the "haves" and the "have nots" is only growing wider.

Causal Factors

There are many factors or impediments that may contribute to the lack of adoption of broadband access in households with students: Comparatively high monthly cost, multi-year contract requirements, geographically inaccessible locations, customer mobility, personal choice, lack of computer, fear of inappropriate content, and others. Research is showing that cell phone and mobile access is actually contributing to a modest decline in home wired broadband services.

Broadband Adoption Data

Census data¹ from 2013 revealed that 25 million households (21%) have no regular Internet access at all, either at home or elsewhere. Overall, 84% of U.S. households own a computer, and 73% of U.S.

households have a computer with a broadband connection to the internet, the bureau reported. The Pew Research Center² found that 70% of Americans have broadband access. Among households with incomes below \$20,000, most do not have an internet subscription for a computer, cell phone or other device, though they may have free access at a local library or elsewhere. Among households with incomes of \$20,000 and higher, most households have their own broadband subscriptions. The Nebraska Rural Poll³ found that 82% of Nebraskans subscribe to a high-speed Internet service at home, other than a cellular data plan. Nine percent (9%) of Nebraskans have no Internet access at home.

Alternates to Home Access

One interim strategy to achieving more accessible Internet for economically challenged students is to open up free Internet access points at public or private locations:

- School buildings
- Library buildings
- Municipal recreation centers
- Churches
- Cultural centers
- Restaurants and coffee shops

But, none of these locations are as convenient or as safe as the students' own homes when it comes to doing Internet research, completing homework assignments, or accessing their school district's digital resources. Unfortunately, many students with domestic responsibilities or part-time jobs after school are not able to access these alternate Internet locations.

Recommendations

As progress continues to meet the established expectations, there is an increasing need for equitable access outside of the school building to ensure opportunities for anytime, anywhere educational access for all. By 2018, an estimated 100,000 Nebraska students will have school-owned computers and tablets for 1:1 learning, and most of these will be taken home nightly. Looking forward, Nebraska educators, especially in the areas of career and technical education, envision *digital inclusion*⁴ with equity of access and readiness of communities to provide access to opportunities in a digital age.

The Nebraska Department of Education and State OCIO support expanding after hour use of E-rate eligible services to students in their homes. Purchased bandwidth sits idle during the 4:00pm to 6:00am hours of each day, and is used little over weekend hours. New opportunities such as the use of TV White Space provide an inexpensive alternative to delivering broadband to homes that do not have or cannot afford access. By allowing off-campus use of existing E-rate connectivity, schools are able to make broadband available to these students.

Given the national importance and public interest of connecting all students to high capacity broadband, and the nature of the deadline at issue, the State OCIO and Nebraska Department of Education urge the Commission to allow E-rate subsidized broadband networks to be accessed by students at home for educational purposes, without requiring the E-rate applicant to cost allocate the portion of the traffic attributable to off-campus use. E-rate program rules are critically important. However, the E-rate program needs to be flexible in order to ensure equitable access to high quality content and online learning.

The Nebraska OCIO and the Nebraska Department of Education applaud the Commission for its efforts to ensure our nation's students receive access to the high-speed broadband connectivity and technology necessary for 21st century digital learning, and appreciates the Commission's review of these comments on this matter. If there are any questions, please contact Tom Rolfes, Education I.T. Manager at (402) 471-7969, tom.rolfes@nebraska.gov or SuAnn Witt, State E-rate Coordinator at (402) 471-2085, suann.witt@nebraska.gov.

Respectfully Submitted,



Ed Toner
Chief Information Officer
State of Nebraska
501 S. 14th Street, P.O. Box 95045
Lincoln, NE 68509-5045
ed.toner@nebraska.gov
(402) 471-3717



Dr. Dean Folkers
Chief Information Officer
Nebraska Dept of Education
301 Centennial Mall South
Lincoln, NE 68509-4897
dean.folkers@nebraska.gov
(402) 471-4740

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About the Nebraska Department of Education

The Nebraska State Board of Education, along with the Commissioner of Education, provide policy and direction for the work of the Nebraska Department of Education and the K-12 system of education in Nebraska. A specific aspect of State Board and Commissioner duties includes establishing rules, regulations, and policies to ensure a quality education system for Nebraskans. The accreditation of schools, including use and access of distance education courses, and a specific virtual education policy, focus on the implementation and support for virtual education for students and professional development for teachers.

In addition, state laws support digital access and implementation within Nebraska schools and establishes a relationship with statewide broadband initiatives and efforts to ensure access to broadband in Nebraska.

(N.R.S. 79-304 to 79-321; N.R.S. 79-1301 to 79-1304)

About the Office of the CIO

The Office of the Chief Information Officer was created to assure a coordinated, efficient and cost effective approach is taken on an enterprise level for the deployment of technology by Nebraska State Government. The Office of the CIO provides a wide range of technology services to state agencies, boards and commissions, as well as political subdivisions. As the State continues to explore shared services, we have eliminated the duplication of several IT expenditures and services, lowered costs through enterprise purchases and agreements, and provided more efficient and effective ways to expand access to government services.

Resources

¹U.S. Census Bureau *Computer and Internet Use in the United States*, 2013, as retrieved from <http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf>, 9/14/2016.

²Pew Research Center-*Home Broadband Survey*, 2015, as retrieved from <http://www.pewinternet.org/2015/12/21/home-broadband-2015/>, 9/14/2016.

³*Nebraska Rural Poll--Broadband and Mobile Internet Services in Nonmetropolitan Nebraska*, 2016, as retrieved from <http://ruralpoll.unl.edu/pdf/16broadband.pdf>, 9/19/2016.

⁴*Digital Inclusion Survey*, College of Information Studies, University of Maryland <http://digitalinclusion.umd.edu/content/what-digital-inclusion>